

IN THE CLAIMS

Please amend the claims to read as follows:

1. (Previously Presented) A service apparatus implemented in a machine, comprising:

a service request receiver to receive a request for a first service;

a storage;

a set of virtual machines stored in the storage, each virtual machine to implement a service;

a service manager to manage the set of virtual machines and to select a first virtual machine from a plurality of virtual machines offering the first service responsive to the request; and

a transmitter to return an access to the first virtual machine in the set of virtual machines as a response to the request for the first service.

2. (Original) A service apparatus according to claim 1, wherein:
the service apparatus further comprises:

a database of service provider data; and

an image constructor to use the database to construct an image; and

the service manager is operative to install the image as the first virtual machine in the set of virtual machines.

3. (Original) A service apparatus according to claim 1, wherein:
the service apparatus further comprises a database of images; and
the service manager is operative to install a first image from the database of images as the first virtual machine in the set of virtual machines.

4. (Original) A service apparatus according to claim 1, further comprising an archiver to archive the virtual machine.

5. (Original) A service apparatus according to claim 1, further comprising a deleter to delete the virtual machine.

6. (Original) A service apparatus according to claim 1, the service manager including a table stored in the storage, the table to indicate a state for each virtual machine in the set of virtual machines.

7. (Original) A service apparatus according to claim 1, further comprising a list of services offered by the service apparatus, the list of services to include at least the services offered by each virtual machine in the set of virtual machines.

8. (Currently Amended) A service apparatus according to claim 1, wherein at least one of the virtual machines implements the first service and a second service.

9. (Previously Presented) A system, comprising:
a network;
a service request receiver to receive a request for a first service;
a list of services offered;
a service manager to manage a set of virtual machines and to select a first virtual machine from a plurality of virtual machines offering the first service responsive to the request; and
a transmitter to return an access to the first virtual machine in the set of virtual machines as a response to the request for the first service.

10. (Original) A system according to claim 9, further comprising a client machine coupled to the network, the client computer to send the request.

11. (Previously Presented) A system according to claim 9, further comprising at least one server farm machine, each server farm machine including:
a storage; and
at least one virtual machine from the set of virtual machines, stored in the storage of the server farm machine, each virtual machine to implement a service.

12. (Original) A system according to claim 9, further comprising a list of services offered by the system, the list of services to include at least the services offered by each virtual machine in the set of virtual machines.

13. (Original) A system according to claim 9, further comprising a service apparatus, the service apparatus to include the service request receiver, the service manager, and the transmitter.

14. (Previously Presented) A system according to claim 9, further comprising:

a service apparatus, the service apparatus to include the service request receiver and the transmitter;

at least one server farm machine, each server farm machine to include:

a storage; and

at least one virtual machine from the set of virtual machines, stored in the storage of the server farm machine, each virtual machine to implement a service; and a management machine, the management machine to include the service manager.

15. (Currently Amended) A system according to claim 9, wherein at least one of the virtual machines in the set of virtual machines implements a the first service and a second service.

16. (Currently Amended) A method, comprising:

receiving a request for a service at a server;

accessing a list of services offered by a set of virtual machines supported by a set of machines;

determining if the requested service is in the list of services; and

if the requested service is in the list of services:

determining a plurality of virtual machines offering the requested service;

selecting one of the plurality of virtual machines; and

returning an identifier for the selected virtual machine offering the requested service.

17. (Original) A method according to claim 16, further comprising, if the requested service is not in the list of services:

creating an image for a new virtual machine that offers the requested service;

installing the image for the new virtual machine; and

returning an identifier for the new virtual machine.

18. (Original) A method according to claim 17, further comprising adding the requested service to the list of services.

19. (Original) A method according to claim 18, wherein adding the requested service includes identifying the new virtual machine in the list of services as offering the requested service.

20. (Currently Amended) A method according to claim 17, wherein installing the image includes:

selecting one of ~~a-the~~ set of machines to support the new virtual machine; and
installing the image for the new virtual machine in the selected machine.

21. (Currently Amended) A method according to claim 20, wherein selecting one of ~~a-the~~ set of machines includes selecting the selected machine to balance loads on the machines in the set of machines.

22. (Original) A method according to claim 17, wherein creating an image includes selecting a combination of software packages that define the new virtual machine to offer the requested service.

23. (Original) A method according to claim 17, wherein creating an image includes copying the image for the new virtual machine from a set of pre-constructed images.

24. (Original) A method according to claim 16, wherein:
determining the virtual machine offering the requested service includes:
determining that a new virtual machine should offer the requested service;
creating an image for the new virtual machine; and
installing the image for the new virtual machine;
returning an identifier for the virtual machine includes returning an identifier for the new virtual machine.

25. (Canceled)

26. (Original) A method according to claim 16, wherein determining the virtual machine includes:

determining if the virtual machine is active, sleeping, or archived; and
if the requested machine is sleeping or archived, activating the virtual machine.

27. (Previously Presented) An article, comprising:
a storage medium, said storage medium having stored thereon instructions, that, when executed by a machine, result in:

receiving a request for a service;
accessing a list of services offered by a set of virtual machines;
determining if the requested service is in the list of services; and
if the requested service is in the list of services:
determining a plurality of virtual machines offering the requested service;
selecting one of the plurality of virtual machines; and
returning an identifier for the selected virtual machine offering the requested service.

28. (Original) An article according to claim 27, the storage medium further including instructions, that when executed by the machine, result in, if the requested service is not in the list of services:

creating an image for a new virtual machine that offers the requested service;
installing the image for the new virtual machine; and
returning an identifier for the new virtual machine.

29. (Original) An article according to claim 28, the storage medium further including instructions, that when executed by the machine, result in, adding the requested service to the list of services.

30. (Original) An article according to claim 29, wherein adding the requested service includes identifying the new virtual machine in the list of services as offering the requested service.

31. (Original) An article according to claim 28, wherein installing the image includes:

selecting one of a set of machines to support the new virtual machine; and
installing the image for the new virtual machine in the selected machine.

32. (Original) An article according to claim 31, wherein selecting one of a set of machines includes selecting the selected machine to balance loads on the machines in the set of machines.

33. (Original) An article according to claim 28, wherein creating an image includes selecting a combination of software packages that define the new virtual machine to offer the requested service.

34. (Original) An article according to claim 28, wherein creating an image includes copying the image for the new virtual machine from a set of pre-constructed images.

35. (Original) An article according to claim 27, wherein:
determining the virtual machine offering the requested service includes:
determining that a new virtual machine should offer the requested service;
creating an image for the new virtual machine; and
installing the image for the new virtual machine;
returning an identifier for the virtual machine includes returning an identifier for the new virtual machine.

36. (Canceled)

37. (Original) An article according to claim 27, wherein determining the virtual machine includes:
determining if the virtual machine is active, sleeping, or archived; and
if the requested machine is sleeping or archived, activating the virtual machine.

38. (Previously Presented) A service apparatus according to claim 8,
wherein the first virtual machine does not implement the second service.

39. (Previously Presented) A system according to claim 15, wherein the first virtual machine does not implement the second service.

40. (Previously Presented) A method according to claim 16, wherein: accessing a list of services offered by a set of virtual machines includes accessing the list of services offered by the set of virtual machines, the list of services including at least the requested service and a second service; and

selecting one of the plurality of virtual machines includes selecting the one of the plurality of virtual machines offering the requested service and not offering the second service.

41. (Previously Presented) An article according to claim 27, wherein: accessing a list of services offered by a set of virtual machines includes accessing the list of services offered by the set of virtual machines, the list of services including at least the requested service and a second service; and

selecting one of the plurality of virtual machines includes selecting the one of the plurality of virtual machines offering the requested service and not offering the second service.

42. (Previously Presented) A service apparatus according to claim 1, wherein the service manager is operative to select a first virtual machine from a plurality of virtual machines offering the first service responsive to the first service in the request.

43. (Previously Presented) A service apparatus according to claim 42, wherein the set of virtual machines includes a second virtual machine that does not implement the first service.

44. (Previously Presented) A system according to claim 9, wherein the service manager is operative to select a first virtual machine from a plurality of virtual machines offering the first service responsive to the first service in the request.

45. (Previously Presented) A system according to claim 44, wherein the set of virtual machines includes a second virtual machine that does not implement the first service.

46. (Previously Presented) A method according to claim 16, wherein selecting one of the plurality of virtual machines includes selecting one of the plurality of virtual machines responsive to the requested service.

47. (Previously Presented) A method according to claim 46, wherein accessing a list of services offered by a set of virtual machines includes accessing the list of services offered by the set of virtual machines, the set of virtual machines including a virtual machine that does not implement the first service.

48. (Previously Presented) An article according to claim 27, wherein selecting one of the plurality of virtual machines includes selecting one of the plurality of virtual machines responsive to the requested service.

49. (Currently Amended) ~~A service apparatus~~ An article according to claim 48, wherein accessing a list of services offered by a set of virtual machines includes accessing the list of services offered by the set of virtual machines, the set of virtual machines including a virtual machine that does not implement the first service.

50. (New) A service apparatus according to claim 1, wherein at least one virtual machine in the set of virtual machines can process multiple requests.

51. (New) A system according to claim 9, wherein at least one virtual machine in the set of virtual machines can process multiple requests.

52. (New) A method according to claim 16, wherein accessing a list of services offered by a set of virtual machines supported by a set of machines, wherein at one virtual machine in the set of virtual machines can process multiple requests.

53. (New) An article according to claim 27, wherein accessing a list of services offered by a set of virtual machines, wherein at one virtual machine in the set of virtual machines can process multiple requests.